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Terry W. Kramer, Esq. Kramer & Amado, P.C. 1725 Duke Street, Suite 240 Alexandria, VA 22314			EXAMINER	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/695,952 Filing Date: October 30, 2003 Appellant(s): BENHAMOU, LEON

> Eric J. Nuss (Reg. No. 40,106)

> > For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed February 22, 2012 appealing from the Office action mailed September 14, 2011.

# (1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

# (2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The following is a list of claims that are rejected and pending in the application: Claims 1-20 are pending and rejected.

#### (4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

# (5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

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## (6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

# (7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

#### (8) Evidence Relied Upon

6,697,845 Andrews 02-2004

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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#### Claim Rejections - 35 U\$C § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 (c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 4-10, and 12-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent No. 6,697,845 to Andrews (hereinafter Andrews).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

## Regarding claim 1

Andrews teaches a method of providing secure network management communications within a communication network, the communication network including a plurality of network elements each adapted to generate and process legacy network

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management messages in conformance with a legacy management system, the method comprising:

embedding a first legacy network management message within a first Simple Network Management Protocol (SNMP) message at a first network element (Col. 4, lines 36-43 - SNMP message "wrapper");

transmitting the first SNMP message over the network to a second network element (Col. 5, lines 42-50 - network manager generates SNMP request; col. 7, lines 17-20 - SNMP transmission to the managed node (second network element));

extracting the first legacy network management message from the first SNMP message at the second network element (Col. 7, lines 20-23 - agent parses SNMP request, lines 25-29 - agent re-assembles the message); and

transmitting the extracted first legacy network management message to a legacy agent (Col. 3, lines 30-35, Col. 7, lines 29-30, forwarding the message to a peer agent at the node).

#### Regarding claim 2

Andrews teaches the method of claim 1 wherein the step of transmitting the first SNMP message comprises transmitting the first SNMP message in conformance with a secure version of SNMP (Col. 4, lines 17-20).

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Regarding claim 4

Andrews teaches the method of claim 1 wherein the legacy management system

provides less security than SNMP (Col. 4, lines 10-20 - AgentX protocol runs under

SNMP administrative framework that defines authentication, access control and privacy

policies; col. 4, line 28 - UDP is less secure than SNMP).

Regarding claim 5

Andrews teaches the method of claim 1 comprising the further steps of:

generating the first legacy network management message at the first network element (

Col. 3, lines 5-8 - AgentX PDUs are generated by a master agent - first network

element); and processing the first legacy network management message at the second

network element (Col. 3, lines 8-9 - re-assembly by PSA (second network element) of

received AgentX packets into SNMP PDU packets).

Regarding claim 6

Andrews teaches the method of claim 5 comprising the further steps of:

generating a second legacy network management message at the second network

element in response to the first legacy network management message; embedding the

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second legacy network management message within a second SNMP message at the second network element; transmitting the second SNMP message over the network to the first network element; and extracting the second legacy network management message from the second SNMP message at the first network element; and transmitting the extracted second legacy network management message to a legacy agent (Col. 3, lines 26-35, Col. 4, lines 36-43, Col. 5, lines 42-50, Col. 7, lines 20-30 - conversion and re-assembly of AgentX protocol into SNMP and back into AgentX at the master agent (first network element) and at the PSA (second network element)).

#### Regarding claim 7

Andrews teaches the method of claim 1 wherein the first network element is a management station, and wherein the second network element is a node (Col. 2, lines 62-66 - management system includes a master agent - first network element, for managing a node - second network element).

#### Regarding claim 8

Andrews teaches the method of claim 1 wherein the first network element is a node, and wherein the second network element is a management station (Col. 5, lines 42-50 - SNMP entity can be both a manager and an agent).

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# Regarding claims 9, 10 and 12

These claims encompass the same scope of the invention as that of the claims 1, 2 and 4-8, except that they set forth the invention as a system rather than a method, as do claims 1, 2 and 4-8. Therefore, claims 9, 10 and 11 are rejected under the same rationale as the claims 1, 2 and 4-8. The instant application defines "an initiator" as an "ability implemented as software to generate network management messages, transmit the network management messages to nodes within the network, and process response messages received in response thereto" (See the first paragraph of the Background section) - the functionality fully covered by the limitations of claims 1, 2 and 4-8 and therefore does not introduce any additional limitation to those introduced by the above rejected claims 1, 2 and 4-8.

#### Regarding claim 13

Andrews teaches a Simple Network Management Protocol (SNMP) initiator at a management station within a communication network, comprising:

instructions for receiving a legacy network management message which conforms to a legacy network management protocol (Col. 2, lines 48-51);

instructions for embedding the legacy network management message within an SNMP message (Col. 2, lines 51-52);

instructions for transmitting the SNMP message to a node within the communication network (Col. 2, lines 53-54);

instructions for extracting the legacy network management message from the SNMP message (Col. 7, lines 20-23); and

instructions for transmitting the extracted legacy network management message to a legacy agent (Col. 3, lines 30-35, Col. 7, lines 29-30).

## Regarding claim 14

Andrews teaches the SNMP initiator of claim 13 wherein the legacy network management protocol provides less security than SNMP (Col. 4, lines 17-20 - AgentX protocol runs under SNMP administrative framework that defines authentication, access control and privacy policies; col. 4, line 28 - UDP is less secure than SNMP).

# Regarding claim 15

Andrews teaches a Simple Network Management Protocol (SNMP) agent at a node within a communication network, comprising:

instructions for receiving a first SNMP message from a management station within a communication network (Col. 3, lines 26-31 - message processing structure on SNMP master agent);

instructions for extracting a first legacy network management message from the first SNMP message, the first legacy network management message conforming to a legacy network management protocol (Col. 3, lines lines 26-30 - parsing SNMP into AgentX protocol request); and

instructions for sending the first legacy network management message to a legacy agent at the node (Col. 3, lines 30-35 - forwarding the message to a peer agent at the node).

#### Regarding claim 16

Andrews teaches the SNMP agent of claim 15 wherein the legacy network management protocol provides less security than SNMP (Col. 4, lines 17-20 - AgentX protocol runs under SNMP administrative framework that defines authentication, access control and privacy policies; col. 4, line 28 - UDP is less secure than SNMP).

#### Regarding claim 17

Andrews teaches the SNMP agent of claim 15 further comprising: instructions for receiving a second legacy network management message from the legacy agent; instructions for embedding the second legacy network management message within a second SNMP message; and instructions for transmitting the second SNMP message to

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the management station (Col. 3, lines 26-35, Col. 4, lines 36-43, Col. 5, lines 42-50, Col.

7, lines 20-30).

Regarding claim 18

Andrews teaches the SNMP agent of claim 17 wherein the legacy network management protocol provides less security than SNMP (Col. 4, lines 17-20 - AgentX protocol runs under SNMP administrative framework that defines authentication, access

control and privacy policies; col. 4, line 28 - UDP is less secure than SNMP).

Regarding claim 19

Andrews teaches the method of claim 1, further comprising: passing an unsolicited legacy network management message from the legacy agent to a SNMP agent (fig.3,306, Col. 7, lines 5-30, Col. 9, lines 15-20).

Regarding claim 20

Andrews teaches the network management system of claim 9, wherein the legacy agent passes an unsolicited legacy network management message to the SNMP agent (fig.3, 306, Col. 7, lines 5-30, Col. 9, lines 15-20).

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## Claim Rejections - 35 use § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,697,845 to Andrews.

#### Regarding claim 3

Andrews teaches the method of claim 2 wherein the step of transmitting the first SNMP message comprises transmitting the first SNMP message in conformance with SNMP.

Andrews does not explicitly teach that the version of SNMP installed is specifically version 3 (SNMPv3).

"Official Notice" is taken that the concept and the advantages of implementing a version 3 of the SNMP protocol over earlier versions 1.5 and 2 are well known in the art.

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Andrews by upgrading to a version 3 of SNMP protocol. One of ordinary skills in the art would be motivated to do so in order to realize additional features of version 3 over earlier versions 1.5 and 2.

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Regarding claim 11

Andrews teaches the system of claim 10 wherein the SNMP initiator is adapted

to transmit the first SNMP message in conformance with SNMP.

Andrews does not explicitly teach that the version of SNMP installed is

specifically version 3 (SNMPv3).

"Official Notice" is taken that the concept and the advantages of

implementing a version 3 of the SNMP protocol over earlier versions 1.5 and 2

are well known in the art.

Therefore, it would have been obvious to one of ordinary skills in the art at

the time the invention was made to modify Andrews by upgrading to a version 3

of SNMP protocol. One of ordinary skills in the art would be motivated to do so in

order to realize additional features of version 3 over earlier versions 1.5 and 2.

(10) Response to Argument

**Argument 1** 

Regarding to independent claims 1, 9, 13 and 15:

(A) The Appellant argues that "Claim 1 recites "transmitting the extracted first

legacy network management message to a legacy agent" (emphasis added). Similar

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subject matter appears in claims 9, 13 and 15. Appellant respectfully submits that Andrews does not disclose suggest, or teach this subject matter" [see Appeal Brief, VII, A.1, page 7].

In response to the Appellant's argument, first, the Examiner asserts that the claim language merely recites a legacy agent without defining or providing any details of legacy agent. (i)

Second, Andrews does disclose a master agent parses (i.e. extracts) the SNMP request and sends it to AgentX subagent, and then the AgentX subagent sends it to a SNMP peer agent; and the SNMP peer agent can be developed as a legacy SNMP agent [see Andrews, figure 3, steps 304-036; Col. 7, lines 5-30; Col. 9, lines 15-21]. Because of the broad claim language of the legacy agent, the SNMP peer agent or the legacy SNMP agent is considered as the legacy agent. (ii)

Third, Andrews also discloses "Simple Network Management Protocol (SNMP) is an advanced network management framework that provide a standardized management system...Essentially, SNMP operates based on a client/server relationship wherein the client program (called the manager) makes virtual connections to a server program (called the SNMP agent) which executes on a network device, and serves information to the manager..." [see Andrews, Col. 1, lines 40-55]; and "The management protocol, i.e., SNMP, provides for exchange of management messages among the various SNMP entities. The form of these message is a message "wrapper" which encapsulates a Protocol

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Data Unit (PDU), wherein the form and meaning of the "wrapper" is preferably defined by the administrative framework of the management system" [see Andrews, Col. 4, lines 36-43]; and "By using PSAs as set forth hereinabove, accordingly, legacy SNMP agents developed by a host of third-party vendors that are currently available for myriad network devices can continue to be used within the AgentX framework without detracting from developing full-fledged AgentX functionality" [see Andrews, Col. 9, lines 15-21]. According to these paragraphs, the management message(s) being used and exchanged in the network management framework (SNMP) by the network devices which include SNMP agents or developed legacy SNMP agents. Thus, these features disclosed in Andrews are considered to read on Applicant's legacy network management message. (iii)

According to (i), (ii) and (iii), Andrews has not failed to disclose or suggest the subject matter of "transmitting the extracted first legacy network management message to a legacy agent" as recited in independent claims 1, 9, 13 and 15.

(B) The Appellant argues that "In this case, Appellant respectfully submits that interpreting a peer agent to be a legacy agent is both inconsistent with the specification and a reasonable interpretation of the claim language that would be reached by one of ordinary skill in the art. Regarding the specification, paragraph [0015] of the published version defines as legacy network management system as "any network management system capable of exchanging legacy network management messages between network elements in accordance with a legacy management protocol." Each node includes a

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legacy agent that "has the ability to respond" to "legacy network management messages." Because the peer agent of Andrews cannot exchange legacy network management messages, it would be unreasonable to interpret the peer agent of Andrews as equivalent to the recited legacy agent" [see Appeal Brief, VII, A.1, page 8].

First, in response to the Appellant's argument that the reference fails to show certain features of applicant's invention, it is noted that the features upon which appellant relies (i.e., "any network management system capable of exchanging legacy network management messages between network elements in accordance with a legacy management protocol." Each node includes a legacy agent that "has the ability to respond" to "legacy network management messages.") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Second, the Examiner asserts that Andrews does disclose "Simple Network Management Protocol (SNMP) is an advanced network management framework that provide a standardized management system...Essentially, SNMP operates based on a client/server relationship wherein the client program (called the manager) makes virtual connections to a server program (called the SNMP agent) which executes on a network device, and serves information to the manager..." [see Andrews, Col. 1, lines 40-55]; and "The management protocol, i.e., SNMP, provides for exchange of management messages among the various SNMP entities. The form of these message is a message "wrapper" which

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encapsulates a Protocol Data Unit (PDU), wherein the form and meaning of the "wrapper" is preferably defined by the administrative framework of the management system" [see Andrews, Col. 4, lines 36-43]; and "By using PSAs as set forth hereinabove, accordingly, legacy SNMP agents developed by a host of third-party vendors that are currently available for myriad network devices can continue to be used within the AgentX framework without detracting from developing full-fledged AgentX functionality" [see Andrews, Col. 9, lines 15-21]; and in Figure 3, steps 306-308, the SNMP peer agent does receive the parsed SNMP request and transmit a SNMP response back to the AgentX subagent (or PSA). According to these paragraphs, the management system capable of exchanging management message(s) (i.e. the messages are considered as legacy network management messages) between the network devices via the network management framework (SNMP) (i.e. SNMP is considered as legacy management protocol), and the network devices includes SNMP agents or legacy SNMP agents which has an ability to respond to the management message (i.e. SNMP request).

Therefore, the Examiner asserts that the interpretation of a SNMP peer agent or legacy SNMP agent to be a legacy agent is still met with the claim language.

(C) The Appellant argues that "In this case, Appellant respectfully submits that the Office Action has failed to consider the words related to legacy network management

messages. While the Examiner alleges that the Office Action is "broadly interpreting the SNMP peer agent" of Andrews to be equivalent to the claimed legacy agent, the Office Action lacks any analysis of the claim language related to legacy network management messages" [see Appeal Brief, VII, A.1, page 8].

In response to the Appellant's argument, please see above responses to Appellant's argument 1 (A)-(B), [i.e. <u>management message(s)</u> being used and exchanged in the <u>network management framework</u> (SNMP) by the network devices which include SNMP agents or <u>legacy SNMP agents</u>], the Examiner has not failed to consider the claim language of "legacy network management messages".

In addition, the Examiner submits that Appellant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

#### Argument 2

Regarding to independent claim 9:

(A) The Appellant argues that "First, independent claim 9, recites "a legacy interface at the management station...While page 5 of the Office Action rejects claim 9, it fails to address the recited legacy interface" [see Appeal Brief, VII, A.1, page 9].

In response to the Appellant's argument, the Examiner submits that

Andrews discloses "SNMP's biggest strength is its widespread popularity-SNMP

agents are available for network devices...SNMP provides a flexible and

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standardized framework that operates like an <u>application programming interface</u> (API) to a network" [see Andrews, Col. 1, lines 56-63]; and "An SNMP entity may operate in a manager role or an agent role. An entity acts in an agent role when it performs SNMP management operations in response to received SNMP messages...In a manager role, an entity initiates management operations by generating SNMP requests..." [see Andrews, Col. 5, lines 43-50]. According to these paragraphs, the network management system, a network device (i.e. SNMP manager) includes an interface for generating and sending the SNMP requests.

Therefore, Andrews's feature of the interface reads on the recited legacy interface.

(B) The Appellant argues that "Second, claim 9, recites "an SNMP agent at the node...While page 5 of the Office Action rejects claim 9, it fails to address the recited SNMP agent" [see Appeal Brief, VII, A.1, page 9].

In response to the Appellant's argument, the Examiner submits that Andrews discloses a SNMP master agent receives and parses (i.e. extracts) the SNMP request and sends it to AgentX subagent [see Andrews, figures 2, 3 (steps 304-036); Col. 7, lines 5-30].

Therefore, Andrews' SNMP master agent reads on the recited SNMP agent.

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(C) The Appellant argues that "Third, claim 9, recites "a legacy agent at the node...While page 5 of the Office Action rejects claim 9, it fails to address the recited legacy agent" [see Appeal Brief, VII, A.1, page 9].

In response to the Appellant's argument, the Examiner submits that Andrews discloses the master agent parses (i.e. extracts) the SNMP request and sends it to AgentX subagent, and then the AgentX subagent sends it to a SNMP peer agent; and the SNMP peer agent can be developed as a legacy SNMP agent [see Andrews, figure 3, steps 304-036; Col. 7, lines 5-30; Col. 9, lines 15-21].

Therefore, Andrews' SNMP peer agent or legacy SNMP agent reads on the recited legacy agent.

#### **Argument 3**

Regarding to claims 3 and 11:

(A) The Appellant argues that "Here, we note that the Office Action solely relies upon "upgrading" Andrews without addressing the recited subject matter of legacy network management messages, subject matter that Andrews lacks" [see Appeal Brief, VII, B, page 11].

In response to the Appellant's argument, first, the Examiner asserts that Andrews does disclose features to read on the subject matter of legacy network management messages (i.e. SNMP messages/requests) [please see Examiner's explanation in the above responses to Arguments 1 and 2]. (i)

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Even though, Andrews does not explicitly disclose the version of SNMP is a version 3 (SNMPv3). However, an "Office Notice" is taken by the Examiner that the concept and the advantages of implementing a version 3 of the SNMP protocol over earlier versions 1.5 and 2 are well known in the art. Please see below for details.

The Examiner submits that Andrews does disclose "Several governing specifications standardized as Request For Comments (RFCs) are available regarding the SNMP management framework, wherein additional information may be found in greater detail. For example, an overall management architecture for SNMP is provided in RFC 2571. The SNMP message protocol is provided in RFC 1906, RFC 2572 and RFC 2574. A set of protocol operations and associated PDU formats is described in RFC 1905. These RFCs are incorporated by reference herein." [see Andrews, Col. 5, lines 51-59]. Moreover, the RFCs are well known in the art.

In addition, especially based on the incorporated RFC 2571, it does provide "SNMP version 3 (SNMPv3), is an extensible SNMP Framework which supplements the SNMPv2 Framework, by supporting the following: - a new SNMP message format, - Security for Messages, - Access Control, and – Remote configuration of SNMP parameters" [see RFC 2571, April 1999, page 14]. Thus, the SNMPv3 is advancement (upgrade) of SNMPv2. (ii)

Therefore, according to (i)-(ii), Appellant's argument is unpersuasive.

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# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/MINH-CHAU NGUYEN/

Primary Examiner, Art Unit 2442

June 1, 2012

Conferees:

/Patrice L Winder/

Primary Examiner, Art Unit 2452

Conferees:

/LAN-DAI T TRUONG/

Examiner, Art Unit 2452, Art Unit 2452